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The object of *Weed Abstracts* is to provide factual summaries and reports of the world scientific and technical literature on weeds, weed control and allied subjects as a means of enabling readers to keep abreast of current developments and to act as a concise source of reference.

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Abbreviations

abs.	abstract	hkg	hectokilogram	ppm	parts per million
ac	acre	h.p.	horse power	ppmv	parts per million by volume
a.e.	acid equivalent	in.	inch	ppmw	parts per million by weight
a.i.	active ingredient	in^2	square inch	pre-em.	pre-emergence
bibl.	bibliography	kg	kilogram	p.t.o.	power take-off
b.p.	boiling point	l.	litre	r.h.	relative humidity
bu	bushel	LD_{50}	median lethal dose	s	second
C	Centigrade	lb	pound	s.	summary
conc.	concentrated	M	molar concentration	sp.	species
concn	concentration	m	metre	spp.	species (plural)
cv.	cultivar(s)	m-	milli- ($\times 10^{-3}$)	ssp.	subspecies
cwt	hundredweight	μ-	micro- ($\times 10^{-6}$)	t	tonne (Mg)
d.b.h.	diameter at breast height	m^2	square metre	temp.	temperature
diam.	diameter	mg	milligram	u.v.	ultra-violet
d.m.	dry matter	min	minute	var.	*varietas*
dz	Doppelzentner (=100 kg)	ml	millilitre	vol.	volume
e.c.	emulsifiable concentrate	mm	millimetre	wt.	weight
F	Fahrenheit	m.p.	melting point	w.p.	wettable powder
F.s.	From summary	N	normal concentration	yd	yard
ft	foot	n.d.	not dated	>	more than
ft^2	square foot	o.m.	organic matter	<	less than
g	gram	oz	ounce	±	with or without
gal	gallon	p.	page	#	pound per acre
h	hour	post-em.	post-emergence	%	percent(age)
ha	hectare	pp.	pages		

Abbreviations for the names of units are the same in the singular and the plural

Languages

An initial capital denotes the language of the paper, a small letter the language of the summary.

Af	Afrikaans	Fi	Finnish	I	Italian	R	Russian
Bg	Bulgarian	Fl	Flemish	J	Japanese	Sh	Serbo-Croat
Cs	Czech	F	French	No	Norwegian	Sk	Slovak
Da	Danish	D	German	Pl	Polish	S	Spanish
Nl	Dutch	He	Hebrew	Pt	Portuguese	Sv	Swedish
E	English	Hu	Hungarian	Ro	Romanian	Tr	Turkish

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Unless otherwise stated, rates of application for growth-regulator herbicides such as 2,4-D, MCPA, fenoprop, dalapon, the benzoics, etc. are given as the acid equivalent. Rates for other herbicides such as the ureas, carbamates, triazines, etc. are given as the active ingredient. Rates for the bipyridyls refer to the cation, only.

List of common names and abbreviations used for herbicides and plant growth regulators in Weed Abstracts

An asterisk (*) signifies approval by the British Standards Institution (BSI)
A dagger (†) signifies approval by the Weed Science Society of America (WSSA)
A double dagger (‡) signifies approval by the International Organization for Standardization (I.S.O.)
Where the name approved by the WSSA or the I.S.O. differs from that approved by the BSI, the WSSA or I.S.O. name is given in brackets opposite the chemical name, with the appropriate symbol attached.

acrolein†	acrylaldehyde	
alachlor*†	α-chloro-2,6-diethyl-*N*-(methoxymethyl)acetanilide	
allidochlor*	*NN*-diallylchloroacetamide	(CDAA†)
ametryne*†	4-ethylamino-6-isopropylamino-2-methylthio-1,3,5-triazine	
aminotriazole	3-amino-1,2,4-triazole	(amitrole†‡)
AMS†	ammonium sulphamate	
anisuron*	*N*-(3,4-dichlorophenyl)-*N*-(4-methoxybenzoyl)-*N′N′*-dimethylurea	
asulam*†‡	methyl (4-aminobenzenesulphonyl) carbamate	
atraton*‡	4-ethylamino-6-isopropylamino-2-methoxy-1,3,5-triazine	(atratone†)
atrazine*†‡	2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine	
aziprotryne*	2-azido-4-isopropylamino-6-methylthio-1,3,5-triazine	
barban*†‡	4-chlorobut-2-ynyl *N*-(3-chlorophenyl)carbamate	
benazolin*‡	4-chloro-2-oxobenzothiazolin-3-ylacetic acid	
benfluralin*	*N*-butyl-*N*-ethyl-2,6-dinitro-4-trifluoromethylaniline	(benefin†)
bensulide*†	*N*-[2-(*O*,*O*-di-isopropyldithiophosphoryl)ethyl] benzene sulphonamide	
benzadox*†	benzamido-oxyacetic acid	
benzthiazuron*	*N*-(benzothiazol-2-yl)-*N′*-methylurea	
bromacil*†‡	5-bromo-6-methyl-3-(1-methyl-n-propyl) uracil	
bromofenoxim*	3,5-dibromo-4-hydroxybenzaldehyde 2,4-dinitrophenyloxime	
bromoxynil*†‡	3,5-dibromo-4-hydroxybenzonitrile	
brompyrazone*	5-amino-4-bromo-2-phenylpyridazin-3-one	
buturon*†‡	*N′*-(4-chlorophenyl)-*N*-isobutynyl-*N*-methylurea	
butylate†	*S*-ethyl *NN*-di-isobutyl(thiocarbamate)	
carbasulam*	methyl *N*-(4-[methoxycarbamoyl]benzenesulphonyl)carbamate	
carbetamide*†	D-*N*-ethyl-2-(phenylcarbamoyloxy) propionamide	
CDEA†	*NN*-diethylchloroacetamide	
chloramben*†‡	3-amino-2,5-dichlorobenzoic acid	
chloranocryl*‡	*N*-(3,4-dichlorophenyl)methacrylamide	(dicryl†)
chlorazine*†	2-chloro-4,6-bisdiethylamino-1,3,5-triazine	
chlorbromuron*‡	*N′*-(4-bromo-3-chlorophenyl)-*N*-methoxy-*N*-methylurea	
chlorbufam*‡	1-methylprop-2-ynyl *N*-(3-chlorophenyl) carbamate	
chlordane*†	1,2,4,5,6,7,10,10-octachloro-4,7,8,9-tetrahydro-4,7-methyleneindane	
chlorfenac*‡	2,3,6-trichlorophenylacetic acid	(fenac†)
chlorfenprop-methyl*	methyl 2-chloro-3-(4-chlorophenyl)propionate	
chlorflurazole*‡	4,5-dichloro-2-trifluoromethylbenzimidazole	
chlorflurecol*	2-chloro-9-hydroxyfluorene-9-carboxylic acid	
chlormequat*‡	2-chloroethyl-trimethyl-ammonium chloride	(CCC†)
chloropon*‡	2,2,3-trichloropropionic acid	
chloroxuron*†‡	*N′*-4-(4-chlorophenoxy)phenyl-*NN*-dimethylurea	
chloroxynil*	3,5-dichloro-4-hydroxybenzonitrile	
chlorpropham*†‡	isopropyl *N*-(3-chlorophenyl)carbamate	
chlorthal-dimethyl*‡	2,3,5,6-tetrachloroterephthalic acid dimethyl ester	(DCPA†)
chlorthiamid*	2,6-dichlorothiobenzamide	
chlortoluron*	*N′*-(3-chloro-4-methylphenyl)-*NN*-dimethylurea	
4-CPA*†‡	4-chlorophenoxyacetic acid	
cycloate†	*N*-cyclohexyl-*N*-ethyl-*S*-ethyl(thiocarbamate)	
cycluron*†‡	*N′*-cyclo-octyl-*NN*-dimethylurea	
cypromid*†‡	3,4-dichlorocyclopropanecarboxanilide	
2,4-D*†	2,4-dichlorophenoxyacetic acid	
dalapon*†	2,2-dichloropropionic acid	
dazomet*†‡	3,4,5,6-tetrahydro-3,5-dimethyl-1,3,5-thiadiazine-2-thione	
2,4-DB*†	4-(2,4-dichlorophenoxy)butyric acid	
DCU†	dichloral urea	
2,4-DEP†	tris-(2,4-dichlorophenoxyethyl)phosphite	
2,4-DES	2-(2,4-dichlorophenoxy)ethyl hydrogen sulphate	(sesone†, disul‡)
desmetryne*†	4-isopropylamino-6-methylamino-2-methylthio-1,3,5-triazine	(desmetryn‡)
di-allate*‡	*S*-2,3-dichloroallyl *NN*-di-isopropyl(thiocarbamate)	(diallate†)
dicamba*†‡	3,6-dichloro-2-methoxybenzoic acid	
dichlobenil*†‡	2,6-dichlorobenzonitrile	
dichlone*†	2,3-dichloro-1,4-naphthaquinone	
dichlormate†	3,4-dichlorobenzyl *N*-methylcarbamate	
dichlorprop*†‡	(±) 2-(2,4-dichlorophenoxy)propionic acid	
difenoxuron*‡	*N′*-4-(4-methoxyphenoxy)phenyl-*NN*-dimethylurea	
dimethazone*	4,5-dimethoxy-2-phenylpyridazin-3(2*H*)-one	
dimexan*	di(methoxythiocarbonyl)disulphide	(dimexano‡)
dinofenate*	2,4-dinitrophenyl 2,4-dinitro-6-s-butylphenyl carbonate	
dinoprop*‡	2-isopropyl-3-methyl-4,6-dinitrophenol	
dinosam*†	2-(1-methyl-n-butyl)-4,6-dinitrophenol	

dinoseb*†‡	2-(1-methylpropyl)-4,6-dinitrophenol	
dinoterb*‡	4,6-dinitro-2-t-butylphenol	
diphenamid*†‡	*NN*-dimethyl-αα-diphenylacetamide	
diphenatrile†	diphenylacetonitrile	
dipropalin†	2,6-dinitro-*NN*-dipropyl-4-methylaniline	
diquat*†‡	9,10-dihydro-8a, 10a-diazoniaphenanthrene	
diuron*†‡	*N′*-(3,4-dichlorophenyl)-*NN*-dimethylurea	
DMPA†	*O*-(2,4-dichlorophenyl) *O′*-methyl *N*-isopropyl phosphoramidothioate	
DNOC*†‡	2-methyl-4,6-dinitrophenol	
DSMA†	disodium methylarsonate	
endothal*‡	7-oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid	(endothall†)
EPTC*†	*S*-ethyl *NN*-dipropyl(thiocarbamate)	
erbon†‡	2-(2,4,5-trichlorophenoxy)ethyl 2,2-dichloropropionate	
etinofen*‡	2-ethoxymethyl-4,6-dinitrophenol	
EXD†	di(ethoxythiocarbonyl) disulphide	
fenoprop*‡	(±) 2-(2,4,5-trichlorophenoxy)propionic acid	(silvex†)
fenuron*†‡	*NN*-dimethyl-*N′*-phenylurea	
fenuron-TCA†	*NN*-dimethyl-*N′*-phenyluronium trichloroacetate	
flumezin*	2-methyl-4-(3-trifluoromethylphenyl)-tetrahydro-1,2,4-oxadiazine-3,5-dione	
fluometuron*†‡	*N′*-(3-trifluoromethylphenyl)-*NN*-dimethylurea	
fluorodifen*	4-nitrophenyl 2-nitro-4-trifluoromethylphenyl ether	
flurecol*†	9-hydroxyfluorene-9-carboxylic acid	(flurenol‡)
fluromidine*	6-chloro-2-trifluoromethyl-3*H*-imidazo[4,5-*b*]pyridine	
GA	gibberellic acid	
haloxydine*	3,5-dichloro-2,6-difluoro-4-hydroxypyridine	
hexaflurate†	potassium hexafluoroarsenate	
IAA	indolylacetic acid	
IBA	indolylbutyric acid	
ioxynil*†‡	4-hydroxy-3,5-di-iodobenzonitrile	
ipazine*†‡	2-chloro-4-diethylamino-6-isopropylamino-1,3,5-triazine	
isocil*†‡	5-bromo-3-isopropyl-6-methyluracil	
isonoruron*	*N′*-[1 or 2-(hexahydro-4,7-methanoindanyl)]-*NN*-dimethylurea	
isopropalin*†	4-isopropyl-2,6-dinitro-*NN*-dipropylaniline	
lenacil*†‡	3-cyclohexyl-6,7-dihydro-1*H*-cyclopentapyrimidine-2,4-(3*H*,5*H*)dione	
linuron*†‡	*N′*-(3,4-dichlorophenyl)-*N*-methoxy-*N*-methylurea	
MAMA†	monoammonium methylarsonate	
MCPA*†‡	4-chloro-2-methylphenoxyacetic acid	
MCPB*†‡	4-(4-chloro-2-methylphenoxy)butyric acid	
mecoprop*†‡	(±) 2-(4-chloro-2-methylphenoxy)propionic acid	
medinoterb*‡	4,6-dinitro-5-methyl-2-t-butylphenol	
metflurazone*	4-chloro-5-(dimethylamino)-2-(3-trifluoromethylphenyl)pyridazin-3(2*H*)-one	
methabenzthiazuron*	*N*-(benzothiazol-2-yl)-*NN′*-dimethylurea	
metham*†	*N*-methyldithiocarbamic acid	(metam-sodium [=Na salt]‡)
methiuron*	*NN*-dimethyl-*N′*-(3-methylphenyl)thiourea	
methometon*‡	2-methoxy-4,6-bis(3-methoxypropylamino)-1,3,5-triazine	
methoprotryne*‡	4-isopropylamino-6-(3-methoxypropylamino)-2-methylthio-1,3,5-triazine	
metobromuron*†‡	*N′*-(4-bromophenyl)-*N*-methoxy-*N*-methylurea	
metoxuron*	*N′*-(3-chloro-4-methoxyphenyl)-*NN*-dimethylurea	
MH†	1,2,3,6-tetrahydro-3,6-dioxopyridazine	
molinate†	*S*-ethyl *NN*-hexamethylene(thiocarbamate)	
monalide*‡	*N*-(4-chlorophenyl)-2,2-dimethylvaleramide	
monolinuron*†‡	*N′*-(4-chlorophenyl)-*N*-methoxy-*N*-methylurea	
monuron*†‡	*N′*-(4-chlorophenyl)-*NN*-dimethylurea	
monuron-TCA†	*N′*-(4-chlorophenyl)-*NN*-dimethyluronium trichloroacetate	
morfamquat*‡	1,1′-bis(3,5-dimethylmorpholinocarbonylmethyl)-4,4′-bipyridylium	
MSMA†	monosodium methylarsonate	
NAA	naphthylacetic acid	
naptalam*†‡	*N*-1-naphthylphthalamic acid	
neburon*†	*N*-butyl-*N′*-(3,4-dichlorophenyl)-*N*-methylurea	
nitralin†	4-(methylsulphonyl)-2,6-dinitro-*NN*-dipropylaniline	
nitrofen*†‡	2,4-dichlorophenyl 4-nitrophenyl ether	
noruron*‡	*N′*-(hexahydro-4,7-methanoindan-5-yl)-*NN*-dimethylurea	(norea†)
oryzalin†	3,5-dinitro-N^4N^4-dipropylsulphanilamide	
oxapyrazone*	(2-hydroxyethyl)dimethylammonium (4-bromo-2-phenyl-3-pyridazon-5-yl)oxamate	
paraquat*†‡	1,1′-dimethyl-4,4′-bipyridylium	
PCP†	pentachlorophenol	
pebulate*†‡	*S*-propyl *N*-butyl-*N*-ethyl(thiocarbamate)	
pentanochlor*‡	*N*-(3-chloro-4-methylphenyl)-2-methylpentanamide	(solan†)
phenmedipham*†	3-(methoxycarbonylamino)phenyl *N*-(3′-methylphenyl)carbamate	
picloram*†‡	4-amino-3,5,6-trichloropicolinic acid	
prometon*‡	4,6-bisisopropylamino-2-methoxy-1,3,5-triazine	(prometone)
prometryne*†	4,6-bisisopropylamino-2-methylthio-1,3,5-triazine	
pronamide*	3,5-dichloro-*N*-(1,1-dimethylpropynyl)benzamide	
propachlor*†‡	α-chloro-*N*-isopropylacetanilide	
propanil*†‡	*N*-(3,4-dichlorophenyl) propionamide	

propazine*†‡	2-chloro-4,6-bisisopropylamino-1,3,5-triazine	
propham*†‡	isopropyl *N*-phenylcarbamate	
proxan*	isopropyl xanthic acid	(IPX†, proxan-sodium [=Na salt]‡)
pyrazone*	5-amino-4-chloro-2-phenylpyridazin-3(2*H*)-one	(pyrazon)
pyriclor†	2,3,5-trichloro-4-pyridinol	
sebuthylazine*	2-chloro-4-ethylamino-6-s-butylamino-1,3,5-triazine	
siduron*†‡	*N*-(2-methylcyclohexyl)-*N'*-phenylurea	
simazine*†‡	2-chloro-4,6-bisethylamino-1,3,5-triazine	
simeton*	4,6-bisethylamino-2-methoxy-1,3,5-triazine	(simetone†)
simetryne*†	4,6-bisethylamino-2-methylthio-1,3,5-triazine	(simetryn‡)
SMA	sodium monochloroacetate	
sulfallate*‡	2-chloroallyl *NN*-diethyldithiocarbamate	(CDEC†)
swep†	methyl *N*-(3,4-dichlorophenyl)carbamate	
2,4,5-T*†‡	2,4,5-trichlorophenoxyacetic acid	
2,4,5-TB*‡	4-(2,4,5-trichlorophenoxy)butyric acid	
2,3,6-TBA†‡	2,3,6-trichlorobenzoic acid	
TCA†	trichloroacetic acid	(sodium trichloroacetate [=Na salt]‡)
terbacil†	5-chloro-6-methyl-3-t-butyluracil	
terbucarb*	2,6-di-t-butyl-*p*-tolyl *N*-methylcarbamate	(terbutol†)
terbuthylazine*	2-chloro-4-ethylamino-6-t-butylamino-1,3,5-triazine	
terbutryne*	4-ethylamino-2-methylthio-6-t-butylamino-1,3,5-triazine	(terbutryn†)
2,4,5-TES†	2-(2,4,5-trichlorophenoxy)ethyl sulphate	
TIBA	2,3,5-triiodobenzoic acid	
tri-allate*‡	*S*-2,3,3-trichloroallyl *NN*-di-isopropyl(thiocarbamate)	(triallate†)
tricamba*†‡	3,5,6-trichloro-2-methoxybenzoic acid	
trietazine*†	2-chloro-4-diethylamino-6-ethylamino-1,3,5-triazine	
trifluralin*†‡	2,6-dinitro-*NN*-dipropyl-4-trifluoromethylaniline	
trimeturon*†	*N'*-(4-chlorophenyl)-*ONN*-trimethylisourea	
vernolate†	*S*-propyl *NN*-dipropyl(thiocarbamate)	

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ANNUAL SUBJECT INDEX

In general, the Subject Index is not intended to duplicate the Table of Contents or the Species Index. For example, the reader should not look under Grassland in the Subject Index if he wants every reference to (say) ryegrass or to grassland. In the first case he should look under *Lolium* in the Species Index, and, in the second, under Grassland and Herbage Crops in the Table of Contents.

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